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Abstract

RELAY-TO-RELAY DIRECT COMMUNICATIONS SYSTEM IN AN ELECTRIC POWER SYSTEM

The system provides communication of information between at least two protective relays serving a power system line. The communication comprises a series of successive data messages of four characters, each of which includes eight data bits, on eight data channels. The data bits include output function status bits from the transmitting relay on user selected channels, serialized analog data bits on other user selected channels, and virtual terminal data bits on still other user selected channels. A synchronization channel produces information to synchronize the transmission/receiving of the analog data and the virtual terminal data, on the basis of frames of data, each frame containing 18 messages.